AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Amend the title, beginning at page 1, line 3, as follows:

DRIVING MECHANISM USING SHAPE MEMORY ALLOYS INCLUDING A MAGNETIC LATCH ~~AND DEVICES EQUIPPED WITH THE SAME~~

Please replace paragraph [0055] with the following amended paragraph:

[0055] In said driving mechanism 30 using shape memory alloys, when the drive member 3 moves downward with the electric current supplied to the second shape memory alloys coil 2, the magnetic body tube 32 will move to the position facing the first concave part 33a of the latch member 33. Therefore, the magnetic body tube 32 is magnetically fixed inside the first concave part 33a by magnetism of the magnet 34 on its backside, and fixed and held in axis direction. On the other hand, when the first shape memory alloys coil 1 is supplied with the electric current and the drive member 3 moves upward, the magnetic body tube 32 attached to the drive member 3 moves to the position facing the second concave part 33b of the latch member 33. Therefore, the magnetic body tube 32 is magnetically fixed inside the second concave part [[33a]] 33b by magnetism of the magnet 34 on its backside, and fixed and held in axis direction.

Please replace paragraphs [0074]-[0078] with the following amended paragraphs:

[0074] The display device using shape memory alloys 60 in accordance with the second form of embodiment of the present invention operates as below.

Fig. 17 is a flowchart of the operation of the display device using shape memory alloys 60 of the second form of embodiment of the present invention. In Fig. 17, at step ST1, the computer 63 of the control part 12 selects and loads the output data file prepared in advance, and transfers it to the control CPU 65 via the interface 64.

The control CPU 65 processes the data for driving of the lower second shape memory alloys coil 2 corresponding to the drive member 3 to move ~~downward~~ upward at step ST2, based on the loaded output data file, and at step ST3, it processes the data for driving of the upper first shape memory alloys coil 1 corresponding to the drive member 3 to move upward.

[0075] At step ST4, the control CPU 65 transfers the data for driving of the second shape memory alloys coil 2 processed at step ST2 to the drive circuit 4a of each driving mechanism module 20a. Each drive circuit 4a, at step ST5, sequentially drives the corresponding second shape memory alloys coil 2 via the shift resistor 4c based on said data for driving, as well as waits for the pre-determined setting time.

The drive member 3 to move ~~downward~~ upward is displaced ~~downward~~ upward by the current supply from the drive circuit 4a to the second shape memory alloys coil 2, and is fixed and held at the latch position moved ~~downward~~ upward by the magnetic body tube 9a located above magnetically fixed to the magnet plate 9c. Here, each drive circuit 4a sequentially drives the second shape memory alloys coil 2 via the shift resistor 4c, each second shape memory alloys coil 2 is driven at high speed, and each drive member 3 can be moved ~~downward~~ upward at high speed.

[0076] Thereafter at step ST6, the driving of the corresponding second shape memory alloys coil 2 is stopped. Here, though driving of the second shape memory alloys coil 2 is stopped, the drive member 3 moved ~~downward~~ upward is fixed and held by the magnetic latch part 9, respectively.

At step ST6, the control CPU 65 transfers the data for driving of the first shape memory alloys coil 1 processed at step ST3 to the drive circuit 4a of each driving mechanism module 20a using shape memory alloys. Each drive circuit 4a, at step ST7, sequentially drives the corresponding first shape memory alloys coil 1 via the shift resistor 4c based on said data for driving, as well as waits for the pre-determined setting time.

The drive member 3 to move ~~upward~~ downward is displaced upward by the current supply from the drive circuit 4a to the first shape memory alloys coil 1, and is fixed and held at the latch position moved upward by the magnetic body tube 9b located below magnetically fixed to the magnet plate 9c. Here, each drive circuit 4a sequentially drives the first shape memory alloys coil 1 via the shift resistor 4c, each first shape memory alloys coil 1 is driven at high speed, and each drive member 3 can be moved ~~upward~~ downward at high speed.

[0077] At step ST8, the driving of the corresponding first shape memory alloys coil 1 is stopped. Here, though the driving of the first shape memory alloys coil 1 is stopped, the drive member 3 moved ~~upward~~ downward is fixed and held by the magnetic latch part 9, respectively.

One cycle of drive-control of the driving mechanism 20 is completed as described above, the pin 3a of the selected drive member 3 protrudes by the pre-determined quantity on the surface of the display sheet 61, and the two dimensional display of a figure or others is performed by the protruded pin 3a. And returning to the step ST1 mentioned above, said operation is repeated, and the two dimensional display is continuously performed in turn. Here, the display sheet 61 may be detachable. Since the pin 3a of the drive member 3 is held by the magnetic latch part 9 though the display sheet 61 is detached, concave and convex display formed with the pin 3a does not disappear.

[0078] The second form of embodiment of the display device using shape memory alloys of the present invention will be explained referring to Fig. 18. This display device using shape memory alloys 70 is a modified example of display device using shape memory alloys 60 mentioned above, and the display sheet 61 is made to be used in place of a magnet plate 9c of the magnetic latch part 9. In this case, said display sheet 61 is such that its surface region comprises plate-like magnets magnetized in the vertical direction, and an under plate 61b made of a non-magnetic body is provided below it, and the plate-like magnets and the under plate 61b have the penetration hole 61a capable of accepting the pin 3a of the drive member 3 by non-contact. Also, the upper end 3b and the lower end 3c of the pin 3a of the drive member 3 are made of a magnetic material, and the intermediate part is made of a non-magnetic material 3i. By this configuration, when the drive members 3 are moved downward like the first and the third drive

members 3 from the left as shown in Fig. 18, the magnetic body 3b at the upper end of the pin 3a is magnetically fixed to the plate-like magnet (magnet plate 9c), and the lower region of the pin 3a is contained within the range of thickness of said under plate 61a. When the drive members 3 are moved upward like the second, fourth, and the fifth drive members 3 from the left as shown in Fig. 18, the magnetic body [[3b]] 3c at the lower end of the pin 3a is magnetically fixed to the plate-like magnet (magnet plate 9c), and the upper region of the pin 3a protrudes upward from the surface of the display sheet 61.

Please replace paragraph [0081] with the following amended paragraph:

[0081] A fifth form of embodiment of a display device using shape memory alloys of the present invention will be explained referring to Fig. 21. This display device using shape memory alloys 100 is a modified example of the display device 70 or 80 mentioned above, and the display sheet 61 is made to be used also in place of a magnet plate 9c of the magnetic latch part 9, as well as five positions between the upper end and the lower end 3 of the pin 3a of the drive member 3 are made of magnetic body 3h, and their intermediate part is made of non-magnetic body 3i. As shown in Fig. 21, the drive member 3 is fixed and held at each latch position by each magnetic body 3h of said pin 3a magnetically fixed to respective plate-like magnet (magnet plate 9c). Therefore, the display device using shape memory alloys 90 can perform five gradated display by the pin 3a of each drive member 3 protruding five steps on the surface of the display sheet [[11]] 61.

Please replace paragraph [0086] with the following amended paragraph:

[0086] In said display sheet write-in device 110, when the drive member 3 is driven by the control part 62 based on data, the magnetic body tubes 112a and 112b of the display pin 112 connected to the drive member 3 are latched to the magnet plate 114 of the display sheet 111, and detached ~~by magnetism~~ from the drive member 3. In this state, the display sheet 110 is separated from the driving mechanism module using shape memory alloys 20b. The display pins 112 are arranged in the vertical direction depending upon data, and the data is written in by the

concave and convex states on the display sheet 111 (See Fig. 22(b).). After the data of the display sheet 111 is detected, the data can be erased by that the display pin 112 is returned to the original non-protruded state.